

**REMARKS**

The claims have been amended to correct informalities. Applicants will cancel non elected claims 5-17, 19-20, and 22-23 upon indication of allowable subject matter. Applicants reserve the right to file continuing applications directed to non-elected subject matter. Claims 2-4, 18 and 21 have been amended and new claims 24-35 have been added herein. Support for new claims 31 and 32 can be found at page 7, lines 10-12. Support for the remaining new claims and amendments can be found in the claims as filed. No new matter is added by the amendments. Claims 1-4, 18, 21 and 24-35 are now pending in the case and presented for consideration.

In conclusion, Applicant submits that, in light of the foregoing remarks, the present case is in condition for allowance and such favorable action is respectfully requested. If however, some unanswered questions remain in the mind of the Examiner, or if the Examiner would be available to discuss the merits of this case, and assist in facilitating its speedy allowance, the Examiner is invited to contact the Applicant's undersigned representative with any questions, comments or suggestions relating to the referenced patent application.

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Reconsideration and allowance is respectfully requested.

Respectfully submitted,



Edmund J. Sease, Reg. No. 24,741  
McKEE, VOORHEES & SEASE, P.L.C.  
801 Grand Avenue, Suite 3200  
Des Moines, Iowa 50309-2721  
Phone No. (515) 288-3667  
Fax No. (515) 288-1338  
**CUSTOMER NO: 22885**  
Attorneys of Record

- pw -

Application No. 09/696,600

**AMENDMENT — VERSION WITH MARKINGS  
TO SHOW CHANGES MADE**

Please amend claims 2-4, 18 and 21 as follows:

**2. (Amended)**

[A] The method of claim 1, wherein the recombination construct comprises a maize Ds element and the transposase is of maize origin.

**3. (Amended)**

[A] The method of claim 2, wherein the recombination construct further comprises direct repeats proximal to the Ds element[, and an agronomically significant gene internal to the direct repeats, wherein the agronomically significant gene is selected from the group consisting of: genes useful for disease resistance; genes useful for male sterility; genes useful for environmental condition tolerance; and genes useful for the commercially-enhancing a biosynthetic pathway].

**4. (Amended)**

[A] The method of claim 2, wherein the plant in which recombination is induced is selected from the group consisting of: soybean; maize; sugar cane; beet; tobacco; wheat; barley; poppy; rape; sunflower; alfalfa; sorghum; rose; carnation; gerbera; carrot; tomato; lettuce; chicory; pepper; melon; Arabidopsis; and cabbage.

**18. (Amended)**

A [composition of matter] recombination construct which can be induced to undergo homologous recombination upon introduction of a maize transposase comprising [a maize recombination construct having proximal] direct repeat sequences proximal to a Ds element and an agronomically significant gene internal to the direct repeats.

## 21. (Amended)

The recombination construct of claim 18, [A composition of matter of claim 20,] which further comprises a transposase gene under control of an inducible promoter.

Please add new claims 24-35 as follows:

## 24. (New)

The method of claim 3, wherein the recombination construct further comprises an agronomically significant gene internal to the direct repeats.

## 25. (New)

The method of claim 24, wherein the agronomically significant gene is selected from the group consisting of: genes useful for disease resistance; genes useful for male sterility; genes useful for environmental condition tolerance; and genes useful for the commercially-enhancing a biosynthetic pathway.

## 26. (New)

The method of claim 3, wherein the recombination construct further comprises a transposase gene under the control of an inducible promoter.

## 27. (New)

The method of claim 3, wherein the transposase is Ac.

## 28. (New)

The method of claim 26, wherein the transposase is Ac.

## 29. (New)

The method of claim 4, wherein the plant in which recombination is induced is maize.

## 30. (New)

The method of claim 2, wherein the maize Ds element is further defined as containing overlapping sequences having homologous regions, which sequences, when homologously combined, result in a gene.

## 31. (New)

The method of claim 1, wherein the plant is a monocot.

## 32. (New)

The method of claim 1, wherein the plant is a dicot.

## 33. (New)

The method of claim 30, wherein the gene is selected from the group consisting of: genes useful for disease resistance; genes useful for male sterility; genes useful for environmental condition tolerance; and genes useful for the commercially-enhancing a biosynthetic pathway.

## 34. (New)

The recombination construct of claim 21, wherein the transposase is Ac.

## 35. (New)

The recombination construct of claim 18, wherein the gene is selected from the group consisting of: genes useful for disease resistance; genes useful for male sterility; genes useful for environmental condition tolerance; and genes useful for the commercially-enhancing a biosynthetic pathway.